

Tennessee Department of Environment and Conservation
Division of Water Pollution Control
Mining Section
3711 Middlebrook Pike
Knoxville, Tennessee 37921-6538
Phone (865) 594-6035 Fax (865) 594-5253

December 10, 2007

NOTICE OF DETERMINATION

Affordable Development Park, LLC Tri-County Limestone Quarry NPDES Permit TN0079782 (Draft) Campbell County, Tennessee

Dear Concerned Citizen:

Thank you for participating in the public comment process for this draft National Pollutant Discharge Elimination System (NPDES) permit. Approximately fifty (50) people attended the hearing for this permit application. This group included property owners, local residents, consultants, concerned citizens, and the news media. The hearing was held at Cove Lake State Park in Campbell County on October 16, 2007.

The application was for an NPDES permit authorizing the discharge of treated wastewater and storm water into an unnamed tributary of the Right Fork Coal Creek. The proposed limestone quarry would be located near the community of Vasper in Campbell County and totals 55.5 acres. Surface runoff and quarry wastewater would be treated by a settling pond, series of sumps, and best management practices. The company also applied for a general Aquatic Resources Alteration Permit (ARAP) for a minor stream crossing.

Introductory remarks by the hearing officer provided a brief summary of the project, the purpose of the hearing, and a brief description of hearing procedure.

Seven (7) people testified at the hearing. Several persons provided photographs of the proposed permit area and adjacent property in support of their comments. Copies of petitions and written comments were also submitted. The comment process continued until October 26, 2007. Additional written comments, photographs, petitions, and e-mails were received during this period.

Affordable Development Park, LLC Tri-County Limestone Quarry NPDES Permit TN0079782 (Draft) December 10, 2007 Page 2 of 6

Subjects included in the comments or questions and our responses follow:

1) Administration, NPDES Permit, and Program Limitations

Why was an Environmental Impact Statement (EIS) not conducted for the project?

An EIS is a requirement for "Federal" actions that are determined to have a significant effect on the environment. Permits issued by NPDES approved states do not require an EIS. Tennessee is an approved state and the issuance of this permit is a state action.

TVA is concerned about the project's potential to impact ground water. The agency is monitoring leakage from Norris Lake to its outlet near the vicinity of the proposed quarry. Excavation activity may interrupt the flow of this leakage and cause an unstable and uncontrolled flow path and outlet. TVA requests that it be contacted if excavation activity at the project proceeds below the 1,050 feet elevation level.

We have informed the company of the TVA's concern and the request to be contacted if excavation activity should proceed below the specified level. TVA is the lead agency on this matter.

Blasting activities at the proposed quarry would cause damage to adjacent property and residences.

The Division does not regulate blasting activity. The Tennessee Department of Commerce and Insurance, Division of Fire Prevention, is responsible for this activity and may be contacted for information regarding regulatory and safety requirements.

Is the operator required to be bonded? The operator should be required to post a bond for damage caused by flooding or blasting.

The NPDES program does not require the posting of a performance bond. Such a requirement would require statutory authorization.

The quarry project will impact underground caves and ground water. Water wells and water supplies would be jeopardized.

The NPDES permit covers discharges to surface waters. The Division does not regulate ground water quantity.

Affordable Development Park, LLC Tri-County Limestone Quarry NPDES Permit TN0079782 (Draft) December 10, 2007 Page 3 of 6

The county already has four (4) quarries. What is the operator's justification that the quarry was needed for additional crushed stone materials?

The citing of an additional quarry in the county does not require justification by the operator under this permit and does not have a role in our decision to allow a discharge of treated wastewater under the NPDES permit program. The applicant submitted information to determine if reasonable alternatives to discharge were available. A determination of social and economic necessity was not required for this NPDES permit application.

2) Quarry Runoff and Drainage Control

Recent flooding of property and residences was directly related to the project. Proper drainage and erosion control to protect downstream property and roads was absent or ineffective. Uncontrolled runoff had overtopped clogged culverts (including a railroad culvert), and caused heavy sedimentation to adjacent property owners and residences.

Logging activities and heavy rains were the cause of flooding in the area. The proposed quarry project had not begun. The operator applied for the required NPDES permit and submitted plans regarding proper drainage control and wastewater treatment for the proposed quarry. The plans for control and treatment of wastewater and storm water runoff include sumps, settling pond, diversion ditch, culverts, and best management practices. The pond is sized to contain and treat the runoff expected from a 10-year/24-hour storm event. If properly operated and maintained, these facilities and measures should be protective of water quality.

The quarry project was not following or implementing the standards and specifications outlined in TDEC's own Erosion and Sediment Control Handbook. Why were these standards not applicable?

The Tennessee Erosion and Sediment Control Handbook is a guide for the design, implementation, and maintenance of Best Management Practices (BMP's) during construction activities. The handbook is primarily designed for developers and contractors in the design of storm water control plans for construction activity.

An applicant for an individual NPDES permit for a quarry operation must submit plans and specifications for wastewater and storm water control and treatment that will meet effluent limitations during the life of the project. These plans focus on more comprehensive controls for wastewater treatment as well as storm water management.

Affordable Development Park, LLC Tri-County Limestone Quarry NPDES Permit TN0079782 (Draft) December 10, 2007 Page 4 of 6

3) Drainage Control for Access Roads and Haul Roads

Does the project include access roads? Runoff and sediment from the roads had caused damage and required clean up. Project plans did not include drainage control for the roads.

Some existing roads will be used for access to the site. The company has applied for a general Aquatic Resources Alterations Permit (ARAP) to cover the construction of a road crossing within the site. The crossing will consist of a culvert/fill that will impact less than 200 feet of the unnamed tributary stream. The NPDES permit includes provisions for controls and monitoring associated with storm water runoff for access roads and haul roads.

4) Wastewater Treatment, Pond Performance, and Design Specifications

Safety and stability of the dam proposed for the settling pond.

The company's design specifications for the settling pond show a dam height of 15 feet and a storage capacity of 21.7 acre feet. This structure size is below the dimensions established for a dam as defined in the *Tennessee Safe Dams Act of 1973*. The pond is designed to contain and treat the volume of water from a 10-year/24-hour storm event. The pond's spillway is designed for a 25-year/24-hour storm event. The NPDES permit requires that treatment facilities be properly operated and maintained.

Pond performance and effectiveness.

The settling pond is designed to control a 10-year/24-hour storm event. This design is standard engineering practice for this type of facility. Ponds meeting this design criterion have performed effectively in meeting the effluent limitations established for solids and other wastewater pollutants associated with quarry operations.

Proper maintenance and containment for fuel tanks.

The permittee is responsible for drainage control for the entire area of the NPDES permit. Discharges from the facility must comply with effluent limitations and conditions of the permit. Part A. 2. of the permit prohibits oil to be contained in the wastewater discharge. A Spill Prevention Control and Countermeasure Plan (SPCC) is not required for this site.

Affordable Development Park, LLC Tri-County Limestone Quarry NPDES Permit TN0079782 (Draft) December 10, 2007 Page 5 of 6

5) Monitoring and Inspections

Testing and sampling by an independent agency.

The NPDES permit requires monitoring to be conducted twice per month and the submittal of monitoring reports on a quarterly basis. The permittee is responsible for monitoring and reporting with oversight by the Division. The oversight role may include compliance monitoring during the inspection process. Additional monitoring may be required based on compliance record or change in nature or frequency of discharge.

Frequency of inspections.

Facilities permitted under NPDES are assigned to Division personnel for regular, routine inspections. More frequent inspections are conducted, if necessary, to assure permit compliance and protection of water quality.

6) Compliance and Enforcement

Why have proper drainage control measures not been implemented or made effective after the Division had issued notices of violations to the company? Why the delay in implementation?

The company responded to the notice of violation by implementing clean-up and remedial drainage control measures. Drainage and runoff in the area was impacted by heavy precipitation and storm activity during this period. Permanent control and treatment structures will be developed and implemented with the issuance of the NPDES permit and plans approval. The operator also implemented an action plan to stabilize an area adjacent to the site entrance in response to a notice of violation and compliance review meeting by the Division's Construction Storm Water Section.

7) Waters of the State, Wetlands, and Endangered Species

The project will destroy a wetland area. Filling the wetlands would eliminate a natural buffer for storage and absorption of rainwater and contribute to downstream flooding and sedimentation.

The proposed facility and treatment structures are located outside of waters of the state. The area containing the proposed quarry operation does not include any jurisdictional wetlands. The proposed settling pond for the quarry will discharge treated wastewater and storm water runoff to an unnamed tributary of the Right Fork of Coal Creek. These streams are designated as Tier I streams and currently meet their classified uses.

Affordable Development Park, LLC Tri-County Limestone Quarry NPDES Permit TN0079782 (Draft) December 10, 2007 Page 6 of 6

Destruction of wetlands and adverse impacts on underground caves would endanger small animals and other species that rely on these areas for habitat and support.

The Anti-Degradation review did not indicate any state or federally listed threatened or endangered species as occurring in the receiving stream or within a two-mile radius of the facility. The Anti-Degradation Report is contained in the permit file and available for public review.

8) Facility Process Water

Will water be used in processing and will this usage increase or decrease water upstream of the facility?

The proposed project does not include plans or specifications for the use of process water. The introduction of process operations requiring process water would require an NPDES permit and plans modification.

9) Facility Stabilization and Permit Termination

Pond reclamation and stabilization after mining is completed.

After mining is completed, the facility must be stabilized to assure that water quality criteria are protected. NPDES permits are terminated after site inspection, proper stabilization, and public notice.

The Division has reviewed the NPDES permit application and supporting plans, considered comments entered into the public record, and conferred with other governmental agencies. Based on the review, the Division has determined that this application for an NPDES permit is complete and meets state and federal requirements. The permit is issued for a five-year term.

Paul F. Duis

Director

Division of Water Pollution Control

12-11.07

Date